

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for controlling starch synthesis in tomatoes comprising:
providing a population of plants derived from interspecific crosses of a green-fruited wild species of the *Lycopersicon* genus ~~*hirsutum*~~ (*Lycopersicon* spp.) with *Lycopersicon esculentum* genotypes; and

selecting individuals of said population that each contain an allele of a gene that encodes for the large subunit (LS1) of ADP-glucose pyrophosphorylase (ADPGPPase) and increases the activity of ~~ADP-glucose pyrophosphorylase (ADPGPPase)~~ ADPGPPase, said allele originating from said *Lycopersicon* ~~*hirsutum*~~ spp.

2-4. (Cancelled)

5. (Currently Amended) The method according to claim 1 wherein said step of selecting comprises selecting by using a molecular marker which is diagnostic for said allele~~gene~~.

6-7. (Cancelled)

8. (Previously Presented) The method according to claim 1 wherein said step of selecting comprises selecting by measuring ADPGPPase activity of said young fruit, and selecting those young fruit with high ADPGPPase activity.

9-16. (Cancelled)

17. (Original) A method according to claim 1 and additionally comprising the step of propagating said individuals of said population.

18. (Original) A method according to claim 17 wherein the step of propagating includes the step of vegetative propagation.

19. (Original) A method according to claim 17 wherein the step of propagating includes the step of propagation by seed.

20 - 22. (Cancelled)

23. (Original) A plant produced according to the method of claim 1.

24. (Cancelled)

25. (Previously Presented) A fruit produced by the plant of claim 23.

26. (Cancelled)

27. (Previously Presented) A seed which when grown yields the plant of claim 23.

28 - 32. (Cancelled)